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FOOD EXPO PRE-SHOW REPORT

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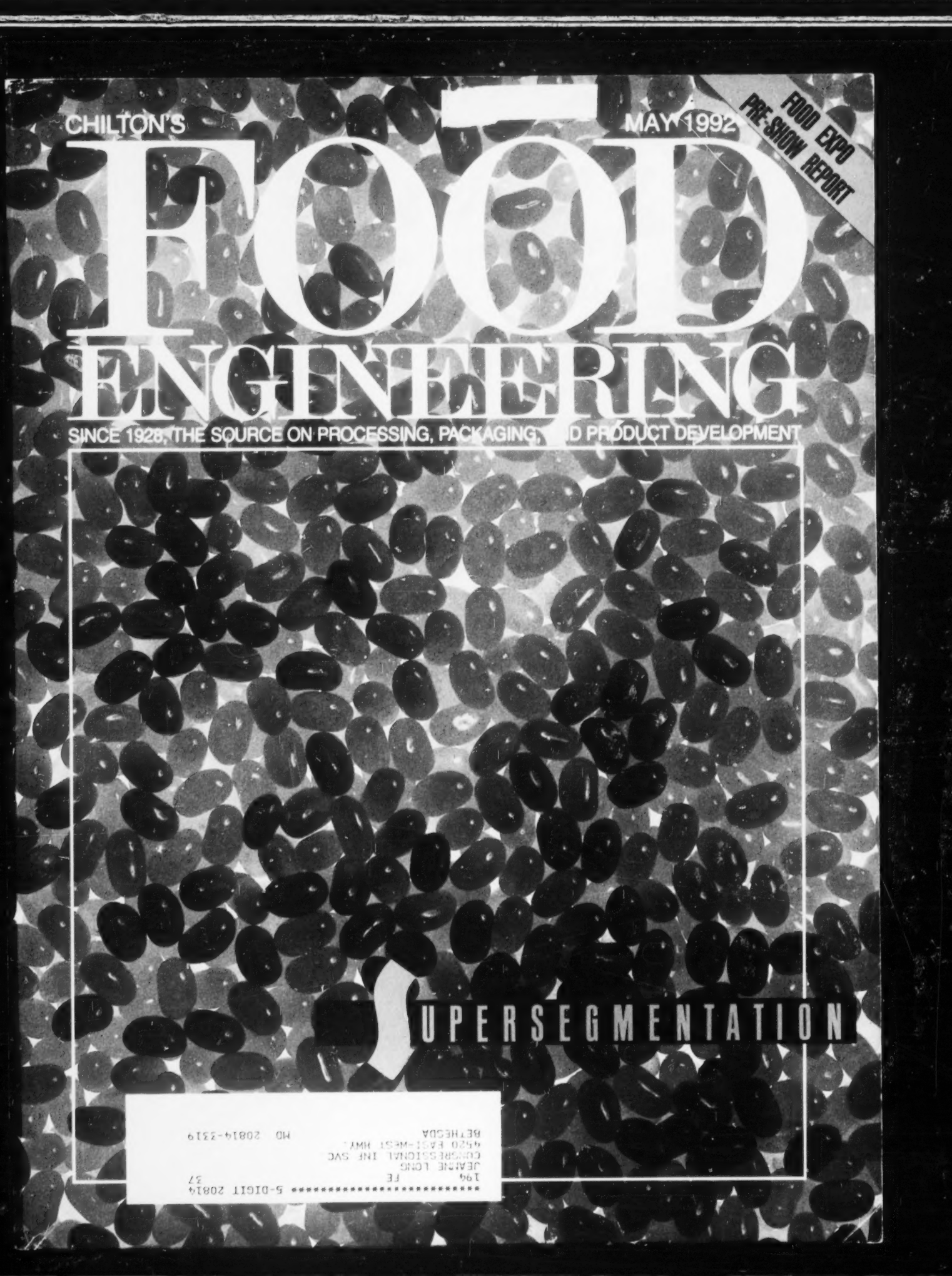

SUPERSEGMENTATION

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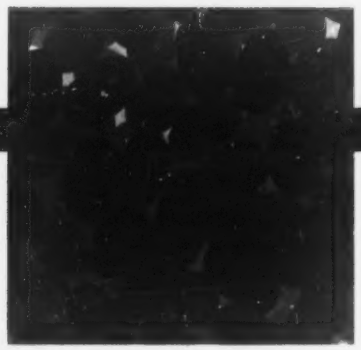

ABOUT THE COVER

Supersegmentation, the wave of the future, is the ability, at both production and retail levels, to address the special food needs of the individual store or even the individual customer—a red jelly bean lover, for example.
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JESSE H. NEAL AWARD-WINNING EDITORS

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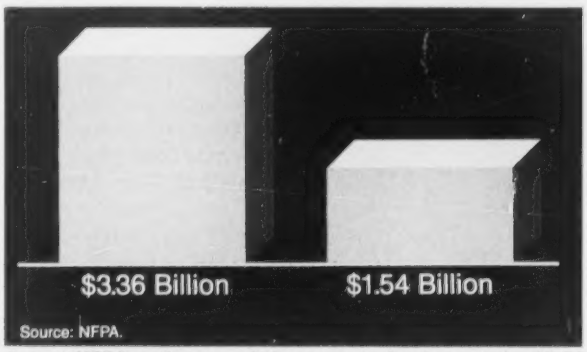
INDUSTRY REPORT

No extension of NLEA deadline expected

Food and Drug Administration (FDA) Commissioner David Kessler said the FDA will meet the deadline to complete its proposals under the Nutrition and Education Labeling Act (NLEA), as he addressed the Food Policy for Health and the Environment conference sponsored by Public Voice for Food and Health Policy in cooperation with the National Food Processors Association (NFPA). Another speaker, Rep. Richard Gephardt, also expressed opposition to an extension. This repudiated rumors in the food industry that predicted the FDA would fail to meet the November deadline. Implementing **the NLEA will cost the food industry $3.36 billion,** according to the latest numbers from the NFPA. This conservative figure reflects the costs of full nutrition analyses, additional equipment and technical personnel, preparation work for labels, including artwork, layout, stripping, color separations and film preparation as well as the actual reprinting of labels, according to the NFPA.



Latest NFPA estimates of the costs to implement the NLEA versus FDA estimates (r).

The NFPA is requesting the FDA to extend the effective date to May 1994. The group further noted that the analytical methods required by the FDA to comply with the proposed NLEA are often inadequate or do not exist.

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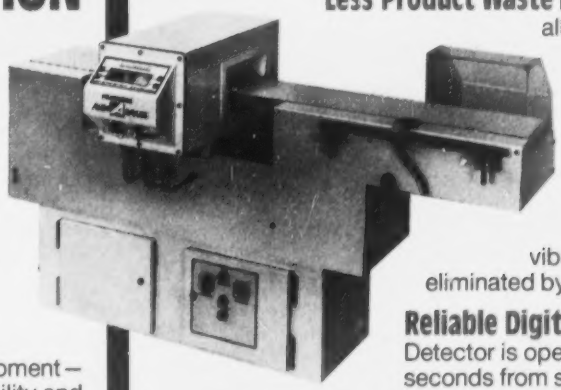

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INGREDIENT BUYERS SURVEY

INGREDIENT BUYERS SURVEY

Food manufacturers struggle with expected NLEA regulations while still trying to market foods to a health conscious market.

PATRICIA M. DILLON
SENIOR ASSOCIATE EDITOR

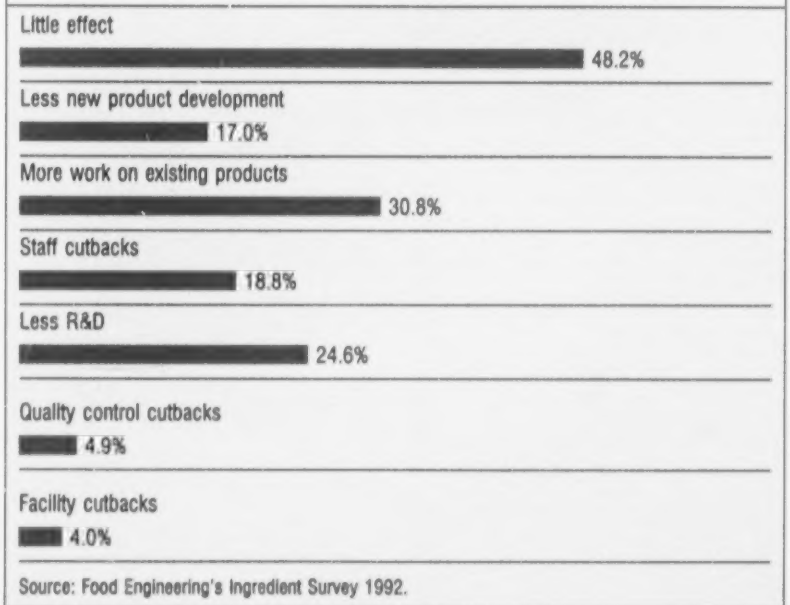
Devising truly new products, reducing the amount of fat in foods and being able to advertise that fact under the new labeling regulations are the chief concerns of those who participated in our annual *Food Engineering* Ingredient Buyer Survey. The coming Nutritional Labeling and Education Act (NLEA) is severely limiting the use of nutrient descriptors—a serious handicap considering low-fat is a prime selling point in today's health conscious market. One seafood manufacturing head wonders if the industry will soon be fighting a nutritional labeling war as companies scramble to reformulate their products to meet the regulations of the NLEA.

Some 49 percent of those surveyed said reducing the amount of fat was a major factor in new food product development. Interestingly, both marketing and R&D were equally the greatest force behind the drive for fat reduction, with more than half selecting low-fat development as a high priority. In terms of industry segments, the fats and oils manufacturers were the biggest champions of low-fat research. Perhaps because their products are perceived as being culprits for containing high levels of fat, seventy-one percent of the fats and oils manufacturers listed fat reduction as an important goal. They may find salvation yet, in the guise of synthetic fat replacers, with 46 percent of the fats and oils manufacturers planning to increase their use of *Simplesse, Olestra,* etc.

While cutting fat levels was a significant concern for all industries, cutting saturation levels of fats didn't garner as much interest with only 30 percent citing it as a major concern. Perhaps simply removing fat from the label was more of a priority.

While cutting fat continues to drive food formulation efforts, reducing other values is taking a backseat. Only 41 percent cited cutting calories as a

The Panel Cites Recession's Effect on Product Development



Source: Food Engineering's Ingredient Survey 1992.

The Fat Frenzy

Most of the food companies surveyed anticipate the Nutritional Labeling and Education Act (NLEA) will seriously hamper the marketing of 'healthy' foods. By and large, in verbatim replies to *FE*'s survey, some one third of the respondents lamented the fact that their low- and reduced-fat claims would have to be changed.

With all the attention the new regulations give to fat, plus the public's increasing concern with fat, formulations will be approached with the idea of minimizing the fat content," said an East Coast vice president of product development. Food companies worry that sales will be hurt once "consumers are advised of (a product's) true fat content," noted a Midwest food engineer.

It seems everyone wants to fit on the low-fat bandwagon. It has even reached the point where a chocolate manufacturer questions how he will label a pound of assorted chocolates.

As a speaker at a recent industry conference said, is it really necessary that *ALL* foods parade about with low-fat labeling? Isn't it ridiculous that all foods are trying to fit into the same svelte fat-free label?

For years marketers have been pointing to the fact that in the frenzy to watch fat intake, sales of indulgent treats such as gourmet ice cream have not faltered. With the availability of fat-free, no-cholesterol salad dressing, has the market for regular dressings collapsed? Take a look at the supermarket shelves to find out. Some markets boast of two full facings of salad dressing with perhaps two or three rows of lite dressings. Meanwhile, dust is *not* accumulating on regular varieties of salad dressings, signifying that somebody is still buying them.

Perhaps all this data on what consumers say they buy and what they really do buy deserves a more critical look. Think about the last social affair you've attended. While it's become socially unacceptable to have dessert without beating one's breast about it, notice good desserts always disappear. Perhaps the pollsters can come up with a better way to find out what people really eat and food marketers won't feel obligated to make health claims about everything we eat. Only then will sanity return to the marketplace.

The Panel Rates the Factors Having a Major Effect on R&D

Positive effect	
Demand for truly new products	60.7%
Cooperation between food companies and suppliers	49.6
Formulations for health conscious consumer	54.5
Interface between R&D/Manufacturing	50.9
Wider selection of ingredients	36.2
Formulations for changing processing requirements	32.6
Line extensions/me-too products	36.6
Low cost/high quality in balance	43.8
Consumer ingredient safety concerns	28.6
Negative effect	
Increased workload for R&D personnel	28.6
Tighter R&D budgets	32.6
No effect	
Computerization/automation of lab procedures	38.8
QC responsibility placed on R&D people	37.1
Food company mergers	51.3
Supplier company mergers	47.3
New formulations for new packaging	42.0

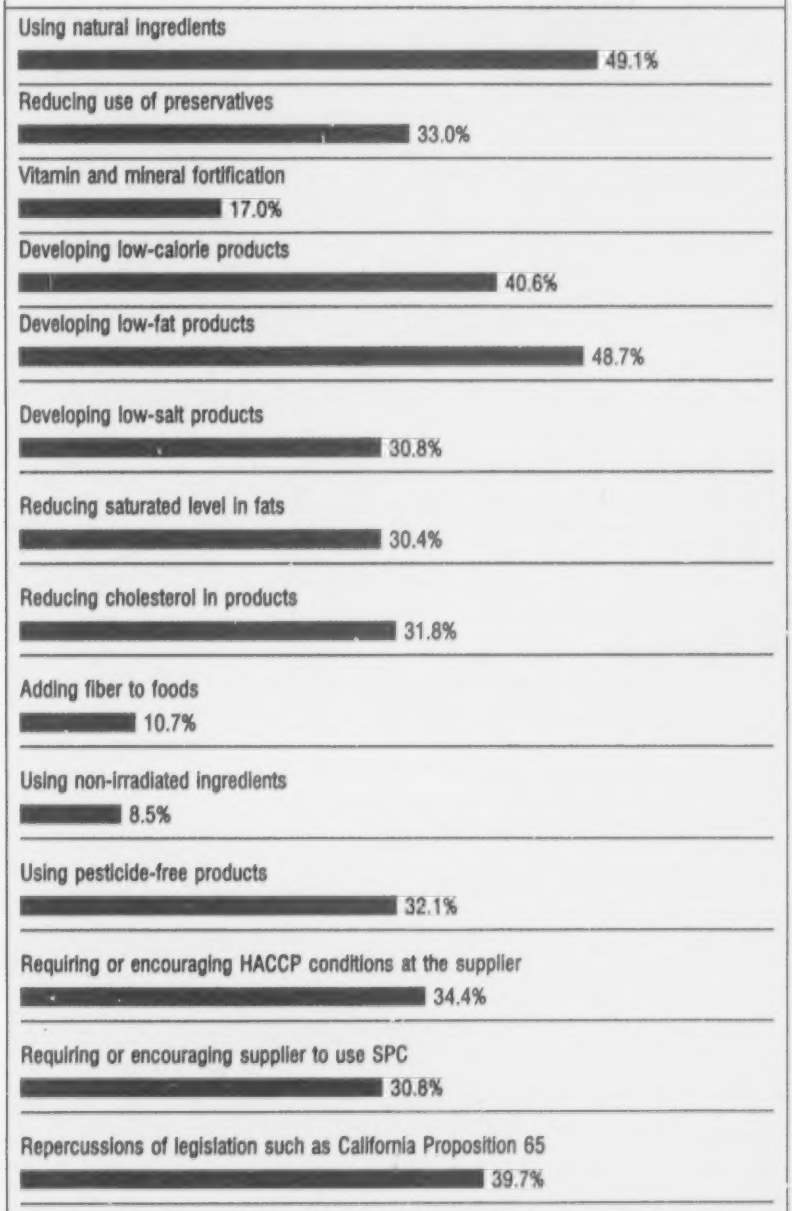
Source: Food Engineering's Ingredient Survey 1992.

formulation priority, and sodium and cholesterol reduction was considered vital by only 31 and 32 percent respectively.

Since the NLEA regulations will be announced in November and will go into effect May 8, 1993, they have become a major preoccupation for the food industry. The NLEA was mentioned throughout *FE*'s Food Ingredient Buyers Survey, even in response to questions not specifically asking about it. This is easy to understand since the regulations are going to have a huge impact on business. The latest estimate of the cost to implement the law in the first year alone approaches $3.36 billion, according to the National Food Processors Association (NFPA). "Labels and packaging will be changed. A large expense will be experienced in order to run assays on all products we make in order to meet requirements for nutritional labeling," said a food technologist for a well-known meat company.

Two of the areas held most in contention between the food industry and the Food and Drug Administration (FDA) is use of nutrient descriptors and serving sizes. When asked

The Panel Lists Major Influences on Product Development



Source: Food Engineering's Ingredient Survey 1992.

specifically, how the proposed labeling regulations will affect a product or formulation, one panelist responded: "In the interpretation of low-fat, low-calorie, fats (saturated versus unsaturated), etc." One company expects to eliminate its low-salt line of products since it is unable to meet the new regulations. Another frustrated bakery plant manager, anticipates, "Not being able to make any claims, so there will be little difference between good for you and perceived good." Many anticipate increased workhours and an overload of paperwork to track down labeling of ingredients from suppliers.

Serving sizes as stipulated by the NLEA are another area of contention. Nutrient descriptors will have to meet specific requirements simultaneously in weight and in per serving—which for some products is proving to be impossible. "Reformulation will be required to reduce fat and sodium levels, which will change the product's density and resulting serving size," according to a project leader for a huge processing firm. "The serving size increases from six to eight ounces for canned beverages, which will require all new nutritional labels," added a product development head at an influential food company. "Labeling changes will require redesign of packages and their labels," summarized a West Coast technical director.

Once overcoming the shock of adapting to the NLEA, most panelists agreed that the life blood of any company is its ability to produce truly new products—close to 61 percent of our panel cited it as effecting R&D. Some 73 percent of companies employing more than 500 employees agreed that new product development was a significant goal, compared to 52 percent of those employing less than 100. Happily, there was only a discrepency of five percent between responses given by management and R&D to the question asking about corporate emphasis on new products. Sometimes various departments within companies pull in different directions, but at least panelists from both departments agreed on this one issue.

It was a big surprise to see almost half of our panelists say that the recession had little if any effect. However, close to a third said there has been more work on existing projects and an

INGREDIENT BUYERS SURVEY

Playing Nostradamus

Respondents have the most fun playing fortune teller when we ask them to predict future innovations. Responses run from the predictable, such as the desire for better fat replacements, to the bold, such as the call that some day consumers will prefer irradiated products to insure food safety and extend shelf life.

Our panel's wish list for the perfect fat replacer includes: fat replacers for frying snack foods, artificial fat to replace fat in meat, chemical control of fats once they are absorbed by the human body, better fat mimetics, to simply better tasting fats. One realist declared, "There are no magic fat replacers. R&D scientists will need to use their own imagination to develop low-fat food alternatives."

Even looking toward the future, labeling casts a shadow across the food manufacturer's mind. "Labeling issues will dramatically affect the types of products available. Reduced fat, lower salt, etc. will cause consumers to see food more as good and bad, which forces food companies to strive to overcome this misconception," lamented the manager of product development for a major food company.

More breakthroughs are expected in the prepared foods front. Complete dinners will be reconstituted any place consumers are on the run—including in the car, according to a Northeast CEO. Microwavable packaging and more packaging aimed at foodservice establishments will further boost the ready-to-eat market. Convenience foods at a lower price, was predicted by several panelists. There must be "a continuance of shelf stable foods. Working families need convenience, such as deli takeout. Those who feel the economic crunch will look for value," said a milk sales manager. "Fresh shelf stable snacks will be the new rave," according to said a California R&D manager.

Finally, pharmafood—foods consumed for specific health benefits will become even more in vogue. Vegetarian foods will become more acceptable to consumers, according to one vice president of R&D.

"The healthy trend will continue. A major breakthrough would be the development of natural colors that are heat stable," said an ingredient supplier.

The Panel Rates R&D Priorities

	Low	Moderate	High	Top
Meat	9.0%	41.8%	38.8%	10.4%
Bakery	12.5	35.9	39.1	12.5
Dairy	9.2	32.3	40.0	13.8
Flavors/Ingredients	12.5	29.7	43.8	10.9
Canned	6.9	58.6	20.7	13.8
Fats/Oils	24.4	29.3	34.1	9.8
Frozen	3.0	45.5	39.4	12.1
Confectionery	10.3	35.9	46.2	7.7
Cereal	13.0	27.8	42.6	14.8
Beverages	15.2	30.3	42.4	6.1

Source: Food Engineering's Ingredient Survey 1992.

additional 25 percent said less money is being pumped into R&D (multiple answers were given). While significant numbers voiced concern about having to pick up the slack from staff reductions, only four percent worried about their facility closing (compared to two percent last year).

The renewed emphasis on quality programs is evident as 44 percent said their companies expect costs to be kept down while increasing quality. One of the most frequent ways to pump up quality was to enlist the aid of suppliers, as evidenced by close to half the panel saying increased cooperation is occurring between food companies and their suppliers in the areas of R&D.

Once considered only a pipedream, there appears to be real cooperation between various departments within food companies. Nearly half praised the increased cooperation between R&D and engineering departments. One head of engineering went as far to say that, "Division between R&D and manufacturing engineers will disappear in progressive companies. Engineering will support R&D and manufacturing to shorten the development cycle."

Increased cooperation is also a significant agent in the "ever increasing fast track development," according to a technical director from the Pacific Northwest. "Full cooperation of all

INGREDIENT BUYERS SURVEY

Ingredient Levels Which the Panel Plans to Increase Use

Acidulants	10.7%	MW flavors	13.8%
Antioxidants	8.5	Natural flavors	41.5
Cheese	18.8	Yeast-derived flavors	12.5
Colors	8.9	Gums	25.0
Dairy proteins	21.4	Mineral supplements	9.8
Dehydrated products	15.6	Protein isolates	14.7
Emulsifers	14.7	Salt	4.5
Enzymes	14.3	Seasonings	25.4
Fats/oils	12.5	Stabilizers	13.8
Fiber	20.1	Starches	19.6
Flavor enhancers	22.3	Sweeteners	7.1
Artificial flavors	9.4	Low-cal sweeteners	24.1
Fat replacers	26.3	Sucrose, fructose	13.4

Source: Food Engineering's Ingredient Survey 1992.

The Panel Lists Effects of Proposed Labeling Regulations

	Little or no effect	Significant effect
Meat	59.7%	40.3%
Bakery	50.0	45.3
Dairy	60.0	35.4
Flavors/ ingredients	53.1	40.6
Canned	62.1	37.9
Fats/Oil	46.3	43.9
Frozen	57.6	39.4
Confectionery	59.0	30.8
Cereal	55.6	40.7
Beverages	54.5	45.5

Source: Food Engineering's Ingredient Survey 1992.

participants in development (purchasing, engineering, manufacturing, R&D, QA) reduces turf issues and surprises. The result is sped-up development, faster manufacturing time and improved efficiency and effectiveness."

In the market, the health conscious consumer continues to impact food company buying decisions. More than 70 percent of the panel reports that formulating for an increasingly health-conscious consumer is a top priority. Close to 60 percent say they are taking advantage of the increased variety of ingredients to meet this demand. Some of the most common comments include the desire to find replacements for ingredients that consumers have interpreted as being "bad" such as fat, salt, calories, and MSG. One company is involved in replacing the chemical-sounding names of ingredients to improve customer perception.

Besides cleaning up the label, one advantage of cutting the amount of fat and oil in certain foods is that a lower level of antioxidants can be used. This boosts the use of natural antioxidants which, according to a process development manager, enhances product quality and shelf life. Reducing or lessening the amount of preservatives is a major concern of one third of the panel. Most of the drive to eliminate preservatives comes from the packaging department which sees its own technology as a replacement for preservatives. Across industry lines, the greatest desire to cut the use of preservatives comes from the canning industry, with 48 percent calling the lessening of preservatives an important goal.

The impact of California Proposition 65 has been strong, with 40 percent saying that it had significant influence on product development decisions. "Many items on California Prop 65 are natural parts of raw grains, making it almost impossible to live with," said the president of a milling company, referring to the legislation that requires labeling of any residues of substances that are carcinogenic or mutogenic.

With the introduction of more organic foods, more ingredient buyers are shopping for pesticide-free foods. This year one-third of our panelists indicated a desire to buy pesticide-free ingredients, an increase from last year's marginal interest. Food safety also remains as an important issue with twenty-nine percent of our panelists saying they will steer clear of ingredients mired in controversy.

Some 42 percent projected an increased demand for natural flavors, with the bulk being used by vegetable and fruit canners and makers of entrees. "Plans call for reformulating products to use natural in place of artificial flavors," said the manager of food technology at an ice cream company. Natural flavors also improve flavor and stability in the packaged product, according to a vice president of R&D. Twenty percent want to reduce the use of artificial flavors.

The *Food Engineering* Ingredient Buyer Survey is available for $150. Call Anne Hartnett at (215)964-4444 or fax to her attention at (215)964-4273. ▲